Glimpse of Family Caregivers' Context: Actual time vs. Desired time for Care

Seung-Eun Cha (University of Suwon, Dept. of Child & Family Welfare)

Hyuna Moon (Seoul National University, GSIS)

Introduction

Attitudes towards family care are changing. Only 27% of Koreans agree that the family is responsible for elderly family member care, according to 2018 national statistics (Kim, 2019). As for population aging, the middle age group of Korean society is becoming a true "Sandwiched Generation" (supporting both unmarried children and elderly parents) due to the longevity increase among elderly parents and postponement of marriage among the young generation. In addition, caring for grandchildren by the young elderly group is becoming more prevalent as the number of employed married women has increased in recent decades. Based on recent statistics from KIHASA, Kim (2019) revealed that households comprising those in their 50s and 60s spend about 18% of their total income supporting their children and elderly parents.

To responded to this family burden, Long Term Care Insurance for the Elderly (LTCI) has been expanded since 2008. Statistics of the LTCI program show a stiff increase in care provision for supporting the daily lives of elderly who suffer from physical and mental ailments. In addition to in-home care service or facility care by LTCI, public care support programs have been launched and expanded by local governments to help elderly households. For example, the "Elderly Total Care Service in the Community" program was started in 2018. Also, in this Spring of 2019, the "Center for Social Service" (also called Social Service One) has opened in four major cities/provinces (Seoul, Gyeonggi-do, Daegu, and Gyeongnam-do) in order to support care workers (child care, elderly care, and disabled care) and care facilities, evaluate the care conditions of elderly households, and develop tailored community care programs. Considering the Care Diamond proposed by Razavi(2007), the shape of the diamond seems to have changed substantially within a decade. Given that social provision of care is expanding, what is the role of family members in this context? Is it true that family is fading away, taking only a minimal role in elderly care?

The government and the market has begun to play an important role in elderly care while,

surprisingly however, the family burden seems unchanged. Family members still report that "taking care of the elderly is getting more and more burdensome." More support has given, but why it is still difficult to care them? How can we understand this paradox? What is the reality of family care and their attitudes/desires for elderly care?

This study aims to investigate the nature of family care in the context of expanding public care provision. This article aims to identify the role of family care and how family members take part in the changing elderly care process. We utilize 'hours of care' among family caregivers as the starting point for this investigation. Here, 'hours of care' signifies that we consider not only the length of time spent providing care, meaning how that limits free time or sleep time, but also, we focus on 'desired time for care', implying the willingness and personal attitudes toward elderly care. We found interesting concepts and framework from recent labor studies that provids new insights to understand such experiences of care work hours.

When looking at experiences in the workplace, some scholars witness increasing polarization of working time (Costa, 2000; Jacobs & Gerson, 2004; Reynolds, 2004). This implies that some workers tend to work more hours than they expect, while others work fewer hours than they prefer. This "time divide" (Jacobs & Gerson, 2004) condition reveals how a mismatch in work hours—discrepancy between desired amount of working time and actual amount of working time—becomes a serious issue in work-life conflict. The degree of mismatch (or we can say the deviance of actual and desired time for work) reflects in one's perception on work-life balance and the quality of life (Reynolds, 2003, 2004; Stewart, & Swaffield, 1997). Indeed, many studies report that this work hour mismatch—rather than the duration of work—is the main factor in the reduction of current life satisfaction among workers (Baslevant & Kirmaiglu, 2014; Drago, Tseng & Wooden, 2005; Wooden, Waren & Drago, 2009; Wunder & Heineck, 2013). Moreover, Böheim and Taylor (2004) find that overworking predicts future work choices, like leaving the job.

In this study, we borrowed these concepts of work-hour mismatch and time-divide circumstances to the care context. We may be able to reveal not only the working condition of family caregivers but also identify their desires/attitudes toward elderly care. As we look back to previous care literature, time spent for care is truly one of the key factors that accurately describe the care situation (Moen & De Pasquale, 2017). Therefore, in many studies, how to measuring the hours of care was critical issue. Fortuantely, TUS (Time Use survey) data provides valuable information that depicts daily care activity hours (in addition to differences between weekdays and weekends) more precisely compared to any other data. As a result, care time related studies have proliferated in many societies, and studies well

reflect the diverse caregiving situations. In these studies, scholars try to answer *how much time* people dedicate to care work/care activities, *who spends more time* in care, and within a 24-hour, *when does care mostly occur*. Recently secondary activities have also been considered, in addition to main activities, in counting care hours (Craig & Brown, 2016; Folbre, 2006).

How to measure care hours correctly has been widely discussed in the literature, yet attitudes toward engaging in care has been rarely questioned. If we consider both actual time and preference for engaging in care, we think a series of interesting questions can be addressed. Are people able to take care of the elderly as much as they want? Or do they tend to engage in care for more hours than they prefer? Is it difficult to adjust care time as one desire? Can we find an "optimal amount of time" for care in the care context?'

As a starting point for answering these interesting questions, we examine actual time and preferred time among family caregiver. As recent statistics indicate that the responsibility for elderly care by the family is sharply decreasing. Considering such attitude changes, the discrepancy between actual versus preferred time for elderly care may be large. We assume family caregivers suffer from severe time mismatch related to care. Therefore, we focused on the elderly care situation in this study.

Literature Review

1. Actual care hours, Preferred care hours, and the Mismatch

According to the previous literature, people tend to spend more hours at work, especially in paid labor situations (Otterbach, 2010). This means many people prefer to work less than they actually do. Recent shifts in the workplace, including the use of smart devices, has blurred the boundaries of work and life, seemingly leading to prolonged work hours. Even part-time workers are obliged to work more hours despite their preferences. The literature on non-standard workers argues that the work contacts are more rigid and non-negotiable compared to standard workers in that work contracts push workers to accept the prolonged working hours or they just leave (Reynolds, 2003).

A mismatch in preferred versus actual work hours can occur in another way: not over-working but under-working (i.e. those who prefer to work more hours). In societies where the unemployment rate is high or a rise in hourly income is experienced, people prefer to work more (Reynolds, 2004). Especially workers with low incomes desire to work more hours in order to reach their desired income. There are also situations in which desire meets reality, thus realizing a matched relationship between

expectation and reality in work hours.

In this study, we describe the distribution of 'actual weekly care hours of a family caregiver' (how long they take care of the elderly), 'the preferred weekly care hours' (how long they prefer to care for the elderly), the degree of the gap between actual and preferred time, and finally 'the types of (mis)match in care hours' (under-caring (prefer to spend more time providing care), matched, over-caring (prefer spend less time providing care)).

Here, we want to find out how the context of care varies from one type to another, using the concept of the deviation of care hours. We seek to identify who over-care/or under-care, and what their care arrangement looks like. We question whether the matched type really exists, and, if so, in what proportion? Can this 'matched type' tell us the optimal combination of public service and family care? For "the over-caring type," do caregivers tend to take care the elderly solely, not able to utilize family resources and public support? To discuss the context of family care for the elderly, we will examine the relationship between actual care hours and life satisfaction (care satisfaction) and the association between the gap and life satisfaction (care satisfaction).

2. The Association between the nature of care work and caregiver's prolonged care hours

Why do people tend to over-work? Answering this question is not simple. Assuming that people are not always passive victims in such situations, one may have the ability to match their preferred number of hours and their actual work, and the gap should not be so huge (Van Echtelt, Glebbeek, & Lindenberg, 2006). However, scholars have argued that social circumstances influence how people make decisions and what they pay attention to. If a person feels finishing a task in a timely manner is important, completing the task is beneficial for their reputation, wishes to receive rewards, and places the sake of the group above themselves, then they may not weigh the benefit of additional hours against the cost in free time.

Also, working additional hours often occurs in a cumulative fashion; small decisions to work more at several moments over several days add up, each decision being unrelated to their contracted weekly working hours (Lindenberg, 1986). Therefore, the outcome of daily decisions may deviate from their preferred hours of work, perhaps while not even noticing it. According to a study of paid labor and business management, job characteristics may be a main driver in causing prolonged work hours. Dutch scholars recently examined the link between job characteristics and over-working (Van Echtelt, Glebbeek & Lindenberg, 2006), finding that being in a supervisory position is strongly associated with

over-working. It was evident that Post-Fordism work conditions, like time-dependent performance, working on strict deadlines, blurry boundaries of work, and having autonomy in work, are also responsible for over-working according to the Dutch study.

Taking these arguments into account, we may assume that long care hours are linked with the characteristics of care work. A great number of analyses on care work are devoted to figuring out the nature of care (England, 2005; Folbre, 2012). Studies in the field of human service (e.g. social work, nursing) also provide some important traits of care work (Choi, 2010; So, Okada, & Shirasawa, 2006). In these fields, care quality evaluations are important when care work is given as a service and paid labor in public provision setting. If we can draw common traits from those distinctive discussions on care work, and if we can find out the specific characteristics that drive prolonged hours for care, we may get a better sense of the care context.

Methods

1. Data and sample characteristics

We utilized employed family caregivers who take care of elderly members in the family from the「2018 Family Survey for Child and Elder Care」for our analysis. Data was gathered from a family member who takes care of their elderly parent as the main caregiver. We define "the main caregiver" as one currently living with an elderly parent and who takes full responsibility of the care situation. Or the main caregiver may live apart from the elderly parent and visit at least three times per week and provide more than 2 hours of care work to the elderly per a visit. The number of family caregiver respondents providing care work to elderly family members in our data was 501. The descriptive of the sample is presented in Table 1.

Table 1 about here

2. Measurement

Care time-related variables: We have four independent variables in this study.

- **Actual care time** was measured by asking "how often do you care for your elderly family member on weekdays and weekends (number of days per week (weekday/weekend) and the average care hours on a caring day (weekday/weekend)?" Based on this measure we calculated the actual care hours performed per week.

- **Preferred care time** was measured by asking "If you could choose, how often would you care for your elderly family member, on weekdays and weekends (numbers of days per week (weekday/weekend) and the average care hours on a caring day (weekday/weekend)?' We summed up the days and the hours of care work and constructed preferred care hours per week.

- **The deviance between actual and preferred care time and the types of care time** was calculated by subtracting actual care time from preferred care time. If the number is less than zero it indicates that the respondent prefers more time for care than they actually perform (under-caring). A number more than zero means a person is caring more hours than one desires (over-caring). If the deviance is zero, it means that one is caring for the elderly as much as one desires (matched).

- **Life satisfaction and care satisfaction** was estimated to consider the quality of life of the family caregiver. Life satisfaction was measured by asking "Generally speaking, are you satisfied in your overall life?" (5-item scale very unsatisfied=1, very satisfied=5). For care satisfaction, we asked the respondents "Are you satisfied with the current care arrangement of your elderly family member?" (5-item scale very unsatisfied=1, very satisfied=5).

- **Care context relevant variables** are for estimating the care context. We used several items from the survey. For estimating the situation of the elderly care recipient, information like age, LTCI grade, living arrangements, the hours of stay-alone time, and the daily activity with help, were used. Detailed care context information was analyzed by collecting not only the caregiver's socio-demographic factors, but also information about financial support from other family members, changes in living arrangements, division of care tasks among family members, use of public services, duration of co-residence (for those who live with the elderly family member), and travel hours for visiting the elderly family member (for those who live apart from the elderly family member). Table 3 provides more information on how contextual variables were measured.

- **Care work characteristics**: Extracting common traits from the literature, we argue that the following characteristics reflect the characteristics of caring labor: attentiveness (AT), building good relationships (GR), receiving gratitude from others (RG), responsibility, experiencing growth, and emotional benefits (GB), and time-dependent performance (TDP). We were able

to draw relevant items from our survey data to measure each characteristic. Most of the items were measured by 5-point Likert scales, except for responsibility for care which was measured using a 10-interval scale ranging 0-100 points. As for receiving gratitude from others (RG), responsibility, experiencing growth and emotional benefits (GB), single-item questions were available. Items for attentiveness (AT), experiencing growth and emotional benefits (GB), and time-dependent performance (TDP), there were two relevant items for each, so we added up the scores and then divided by the number of items in order to construct score ranges from 1 to 5.

Results & Findings

1. Hours Actually Spent Vs. Hours Preferred for Elderly Care

According to Table 2, family caregivers spend, on average, about 8 hours a day providing care to elderly family members on caring days, or about 50 hours a week. However, the average preferred number of hours for care is 24 hours per week, almost half of the actual care hours. Thus the average deviance between actual and preferred care hours is about 26 hours per week. On a daily basis, it was revealed that caregivers, on average, wish to spend 4.5 hours caring for their elderly family member on caring days during the week, while on weekends the preferred number of care hours is 3.8 hours. This indicates that the average caregiver is doing double the amount of care work than they desire. The gap seems to be a bit larger on the weekends compared to weekdays, which means caregivers wish to spend less time on care on weekends compared to weekdays.

Figure 1 displays the distribution of the deviance of actual care time and preferred care time. We can find that the graph is skewed above zero, which implies there are more caregivers in over-caring situations. Still, we can identify that there are some who actually matched their actual care time to what they desired (zero gap). We grouped the respondents into four categories: those who's gap between actual care hours and desired care hours was negative (less than zero) were classified as "under-caring"; those who's desired and actual caring hours were positive (more than zero) and fell into a range of 0% to 25% of the respondents in the positive group (zero to 8 hour gap) were designated as the "matched group"; those in the 25% to 75% range of the respondents on the positive side of zero (9 hour to 33 hour gap between desired and actual care hours) were dubbed the "mild over-caring" group; and finally those in the upper 75% (more than 34 hours difference) were classified as the "severe over-caring" group.

<Figure 1 and Table 3 about here>

In Table 3, we presented the descriptives of the types of care. As mentioned above, there are more people in the over-caring group. Almost 78% of caregivers are caring more hours than they prefer. About 32% of the caregivers, those who are grouped in severe over-caring type, are taking care of the elderly 79 hours per week on average. Even those grouped as mild over-caring caregivers spend 50 hours per week on elderly care. Given that in Korea paid workers are regulated to a maximum 52-hour work week, it is obvious that family caregivers are spending more hours than the average paid workers. The matched group consists of 18% of the caregivers in our sample and this groups spends about 34 hours per week on caregiving. The under-caring type, those who wish to spend more hours on care than they actually do, also spent about 33 hours per week.

2. Differences in the Care Context

As we examine the care context by each type of care (see Table 4), surprisingly, we were able to find more similarities rather than the differences among the types. The under-caring group was distinctive compared to other groups. However, the matched group and over-caring groups were not so different, except for LTCI grade, elderly living arrangements, age of caregiver, employment status of caregiver, use of public services, and the total care sharing tasks. The results show that mild/severe over-caring type tend to live with their elderly family member, partly because the elder family member has a severe ADL/IADL limitation and is unlikely to spend more than 3 hours per day alone. This severe over-caring seems to result in the pooling of all resources because almost 40% of caregivers had to change their living arrangements, were utilizing public services for assistance more compared to other types, and even, in these families, other family members tend to help out with a various tasks to take care of the elderly member. Still, the main caregiver is spending more than 79 hours per week caring.

<Table 4 about here>

On the other hand, caregivers in the matched group in our sample are relatively young and the employment rate is higher than among other types. The care receiver—the elderly—of this type seems to enjoy more independence; still, their mean age is about 81, not so different from other types. We initially assume that, if the matched type exists, the type may utilize public services more than other groups or pool their family resources to manage their care hours to what they desire. However, such a trend was not evident in this analysis. Only the living arrangement, that they live apart from the elderly, was the most distinct feature of this matched type; that means, the caregiver visits the elderly

household from time to time and maybe helps out with various chores.

Figure 2 displays the estimated association between care hours and quality of life of a caregiver. We used life satisfaction and care satisfaction for the estimation of quality of life. We run OLS regression, controlling age, sex, education, and employment status of the caregiver. As shown in the graph, hours of care and satisfaction measures show a negative association, yet it was not statistically significant. Figure 3 is the estimated graph between gap in actual and preferred time spent at care and satisfaction measures. The slope was statistically significant this time, which indicates that it is the gap in care hours that matters for the satisfaction.

<Figure 2 and Figure 3 about here>

3. The Link between Care Work Characteristics and Types of Care

Lastly, we tested the association between care work characteristics and types of care by utilizing a simple ANOVA test, OLS regression, and multinormal logit. As shown in Table 5, severe over-caring types showed a higher score in attentiveness, responsibility, and time-dependent performance compared to other types.

Table 6 also reveals that over-caring is common when attentiveness is required, when the caregiver perceives the necessity to take on greater responsibility for the elderly care recipient, and when time consuming care tasks are needed to care for the elderly family member. The regression model reveals that attentiveness, a good relationship with the elderly family member, personal growth and benefits, and responsibility were associated with actual care time (see Table 6). This implies that caregivers spend longer hours on care work because the elderly family member needs on-call care and the caregiver has a positive emotions towards and feels responsibility for the elderly family member. Yet prolonged care hours are not motivated by personal growth or benefits. We were able to find other sociodemographic factors that were related with actual hours spent caring for the elderly and the gap in care hours. In both models, age and employment status of the caregiver were relevant. Also, higher income was negatively associated with longer care hours or the gap, which means those with financial resources are less likely to spend more hours on elderly care, and they have the means to manage their care hours.

Checking the relevant factors in the deviation of care hours, the results of the multinomial logit model show us that the gap may enlarge mainly because of the needs of on-call care, responsibility for

care, and time dependent tasks (see Table 7).

<Table 5 and Table 6 and Table 7 about here>

4. Optimal Hours for Care, Is that Possible?

We also questioned if the optimal time, a match between actual time spent at care work and the desired time, is possible in the context for caring for the elderly. According to our results in Figure 4, the burden of care is partially driven by the degree of the mismatch in care hours. When one ought to perform more care hours than he/she desires, reduction in quality of life may occur. We find that some people experience zero gap in terms of the discrepancy between actual and desired time. They visit about 2-3 days per week to take care of their elderly family member for about 3-4 hours per visit, less than 9 hours per week.

<Figure 3> about here

This matched type tends to help the elderly member with their daily needs, like doing housework, hospital visits, and completing other chores. This group is not necessarily from a well-off family who can afford public services to assist them (Appendix 2). Rather the elderly care recipient for those in the matched group is quite old and fragile but does not have a serious health condition, thus they are able to live independent lives. Still, family caregivers may need to stand by and pay constant attention to elderly members on a daily basis. Therefore, we conclude that this matched type is not necessarily an optimal type, but could more accurately be described as a 'manageable' situation.

Over-caring situations, especially severe over-caring situations, are characterized by the family caregiver spending many hours at care-related tasks. But they are not doing this alone. Caregivers of this type try to pool all resources, such as utilizing an outside service and seeking help from other family members with financial assistance as well as important care tasks. Still, the caregiver needs to give their full attention to the patient. In many cases this is because the elderly care receiver has a serious health condition, so the care providers have no choice but to take full responsibility for care provision. Based on our results, one possible solution for this group may be shifting to a 40-hour care work week (over-caring type 1), sharing the responsibility, splitting care work into several projects, and living separately from the elderly family member, which is another level of choice to make for these families. We speculate that these four types of care arrangements—under-caring, matched, and over-caring—appear to represent the sequential process of elderly care, from making regular care-visits to constantly 'being there' next to the recipient.

Conclusion

We started this research with suspicious eyes questioning “what is the role of the family in elderly care when public care provision is expanding?” After taking a glimpse at the elderly care situation, we conclude that family is always there from the start to the end. Even though more people believe that the government should to take care of elderly family members when their care is required and social provision had expanded a great deal, we were able to identify that, still, a significant portion of care work is done by family members. Looking after elderly parents is a long process. Family members endure this prolonged journey of care along with the elderly. The family is responsible for watching over the entire process beginning with when the elderly family member becomes fragile, then when they fail to be independent, and continuing on into the period in which the elder family member is fully dependent. At the beginning, caring can be manageable. As time goes by, however, the caregiver’s resources and patience fade away. In the end, someone in the family needs to take full responsibility for the elderly person, that means “to be there at the side day and night,” “become one,” or, in other words, “live at the pace of the elderly patient.”

Because we do not know when this journey starts nor ends, family members get anxious and devastated to meet the elderly family member’s needs. Moreover, elderly care situation varies, as some caregiver may experience the fast track in this process, while others the whole process may take more than 10 years. And some other caregivers maybe trapped in a certain stage for long time. When people say “it is the government’s responsibility to care of the elderly,” it needs to be understood in the proper manner. It seems that, in our opinion, “government should take any kind of action before the family fails.”

Reference

Başlevent, C., & Kirmanoğlu, H. (2014). The impact of deviations from desired hours of work on the life satisfaction of employees. *Social Indicators research*, *118*(1), 33-43.

Böheim, R., & Taylor, M. P. (2004). Actual and preferred working hours. *British Journal of Industrial Relations*, *42*(1), 149-166.

Choi, H.K. (2010). A Study on 'Good Care' perceived by direct care workers of nursing facilities. *Korean Journal of Gerontological Social Welfare 48*, 48(2), 31-58.

Costa, D. L. (2000). The wage and the length of the work day: From the 1890s to 1991. *Journal of Labor Economics*, *18*(1), 156-181.

Craig, L., & Brown, J. (2016). The multitasking parent: Time penalties, dimensions, and gender differences. In *The economics of multitasking* (pp. 33-59). Palgrave Macmillan, New York.

England, P. (2005). Emerging theories of care work. *Annual Review of Sociology.*, *31*, 381-399.

Folbre, N. (2006). Measuring care: Gender, empowerment, and the care economy. *Journal of human development*, *7*(2), 183-199.

Folbre, N. (Ed.). (2012). *For love or money: Care provision in the United States*. Russell Sage Foundation.

Jacobs, J.A., & Gerson, K. (2004). The time divide: Work, family, and gender inequality. *Journal of Industrial Relations 41*(1): 149–66.

Kim (2019) The Double Care Burden and Policy Implications for Middle-aged and Older Heads, *Health and Welfare Form*, May, Korean Institute for Health and Social Affairs.

Lindenberg, S. (1986). The paradox of privatization in consumption. In *paradoxical effects of social behavior* (pp. 297-310). Physica-Verlag HD.

Moen, P., & DePasquale, N. (2017). Family care work: a policy-relevant research agenda. *International Journal of Care and Caring*, *1*(1), 45-62.

Otterbach, S. (2010). Mismatches between actual and preferred work time: Empirical evidence of hours constraints in 21 countries. *Journal of Consumer Policy, 33*(2), 143–161.

Razavi, S. (2007). *The political and social economy of care in a development context: Conceptual issues, research questions and policy options* (No. 3). United Nations Research Institute for Social Development.

Reynolds, J. (2003). You can't always get the hours you want: Mismatches between actual and preferred work hours in the US. *Social Forces*, *81*(4), 1171-1199.

Reynolds, J. (2004, March). When too much is not enough: Actual and preferred work hours in the United States and abroad. In *Sociological Forum* (Vol. 19, No. 1, pp. 89-120). Kluwer Academic Publishers-Plenum Publishers.

So, Jin Yi., Okada, Shinichi, and Shirasawa, M.. (2006). The Effects of Care Worker`s Perceived Job Competence and Interpersonal Relationships on Professional Intrinsic Motivation in Japanese

Nursing Homes. *Journal of the Korean Gerontological Society*, *26*(4), 801-817.

Stewart, M.B. and Swaffield, J.K. (1997) 'Constraints on the desired hours of work of British men', *The Economic Journal* 107(March): 520–35.

Van Echtelt, P. E., Glebbeek, A. C., & Lindenberg, S. M. (2006). The new lumpiness of work: Explaining the mismatch between actual and preferred working hours. *Work, Employment and Society*, *20*(3), 493-512.

Wooden, M., Warren, D., & Drago, R. (2009). Working time mismatch and subjective well being. *British Journal of Industrial Relations*, *47*(1), 147-179.

Wunder, C., & Heineck, G. (2013). Working time preferences, hours mismatch and well-being of couples: Are there spillovers?. *Labour Economics*, *24*, 244-252.

<Table 1> Sample characteristics

			frequency/mean	percent/S.D.
Caregiver	Sex	Male	77	15.37
		Female	424	84.63
	Relationship with elderly	Spouse	79	15.77
		Children or Siblings	422	84.23
	Age group	30-40's	111	22.15
		50's	229	45.71
		60 +	161	32.14
	Education	High school and under	408	81.44
		College and above	93	18.56
	Employment status	Employed	153	30.54
		Not-employed	348	69.46
Elderly recipient	Sex	Male	216	43.11
		Female	285	56.89
	Health status	Fair	52	10.38
		Bad to worse	449	89.62
	Mean age		81.25	6.97
	Living arrangement	Live together	311	62.08
		Live apart	109	37.92

<Table 2> Descriptive of Care Time of Family Caregiver

	Actual Care Time		Preferred Care Time	
	Weekdays	Weekends	Weekdays	Weekends
mean	7.79	7.51	4.53	3.80
SD	227.95	267.10	160.35	183.87
	Actual Care Hours (per week)	Preferred Care Hours (per week)	The Gap (actual - preferred) (per week)	
mean	50.79	24.57	26.22	
SD	27.81	18.51	23.54	

<Table 3> The Type of Care Time (using 25% quintile)

	Freq.	Percent	Weekly actual care hours (mean, (SD))	
Severe over-caring	161	32.14	79.60	21.89
Mild over-caring	230	45.91	50.25	20.50
Matched	93	18.56	34.92	19.04
Under-caring	17	3.39	33.54	16.67

<Table 4> Care Context by Care Hour Types (%, mean)

		Under-caring	Matched	Mild Over-caring	Severe Over-caring
N		17	93	161	230
Elderly recipient age (mean)		83.17	80.69	80.11	82.13
LTCI grade	Very severe (grade 1-2)	0.00%	5.38%	8.26%	9.32%
	Some limit (grade3-5, dementia)	47.06%	39.78%	52.17%	53.42%
	Mild limit (off-grade A, B)	0.00%	2.15%	8.70%	4.35%
	No grade	52.94%	52.69%	32.92%	30.87%
Elderly living arrangements	Co-reside with children/kin	64.71%	30.11%	42.61%	62.11%
	Elderly couple only	0.00%	29.03%	17.39%	35.40%
	Elderly single only	35.29%	40.89%	40.00%	2.48%
Elderly alone time per day(mean, hours)		8.28	7.31	6.89	3.49%
Caregiver's sex	Male	41.18%	15.05%	15.22%	13.04%
	Female	58.82%	84.95%	84.78%	86.96%
Caregivers' age group	30-40's	23.53%	35.49%	16.15%	20.87%
	50's	64.71%	17.90%	48.03%	29.26%
	60+	11.79%	20.43%	31.30%	42.24%
Caregiver's employment rate	Not-employed	23.53%	62.37%	67.39%	81.37%
Financial support from other kin members	Receive support	41.18%	40.86%	50.87%	48.45%
Change in living arrangements	Had changed living arrangements	29.41%	32.26%	25.65%	40.37%
Care duration in years (mean)		3.66	4.44	4.39	5.08
Use public service		17.65%	22.58%	36.96%	35.40%
Co-resided duration in years (among children with co-residing) (mean)		4.17%	4.08%	4.00%	4.50%
Travel distance in min (among those live apart)(mean)		23.33	19.35	18.29	21.33
Family share five major task (% of those who share)		70.59%	76.34%	81.74%	77.64%
# of total sharing tasks (mean)		2.23	1.94	2.34	2.26

<Table 5> Differences and familiarity in the distribution of care work characteristics by the types of mismatches

	Attentive	Good relationship	Receive gratitude	Growth/ benefits	Responsibility to care	Time-dependent
Total	3.04	3.56	1.69	3.33	72.14	3.48
	(0.75)	(0.66)	(0.46)	(0.63)	(18.50)	(0.86)
Mild over-caring	2.92	3.54	1.66	3.32	69.41	3.40
	(0.74)	(0.64)	(0.47)	(0.63)	(18.78)	(0.83)
Severe over-caring	3.37	3.56	1.75	3.34	76.55	3.75
	(0.71)	(0.67)	(0.44)	(0.67)	(17.40)	(0.83)
Matched	2.85	3.61	1.67	3.27	70.16	3.28
	(0.70)	(0.63)	(0.47)	(0.58)	(17.84)	(0.88)
Under-care	2.71	3.65	1.71	3.59	78.24	3.18
	(0.61)	(0.93)	(0.47)	(0.57)	(20.69)	(0.81)

<Table 6> Regression Results of Actual Time Spent for the Elderly Care and the Relevant Factors

	Coef.	Std. Err.	t	P>t	Beta
Attentiveness	14.78	2.89	5.12	***	0.21
Express gratitude	1.43	2.52	0.57		0.02
Build good relationship	4.97	2.46	2.02	**	0.09
Growth/benefits	-1.78	2.61	-0.68	*	-0.03
Responsibility to care	6.98	2.42	2.88	***	0.12
Time dependent	2.05	2.35	0.87		0.04
Elderly gender	0.20	2.26	0.09		0.00
Elderly age	-0.07	0.17	-0.38		-0.02
Giver sex	-0.76	3.29	-0.23		-0.01
Giver age	6.59	1.58	4.18	***	0.19
Giver emp	9.90	2.63	3.76	***	0.16
Giver edu	-0.87	2.82	-0.31		-0.01
Giver hhld income	-1.39	0.36	-3.90	***	-0.18
_cons	13.39	17.62	0.76		.
N	501				
F(13, 487)	12.66				
R-squared	0.25***				

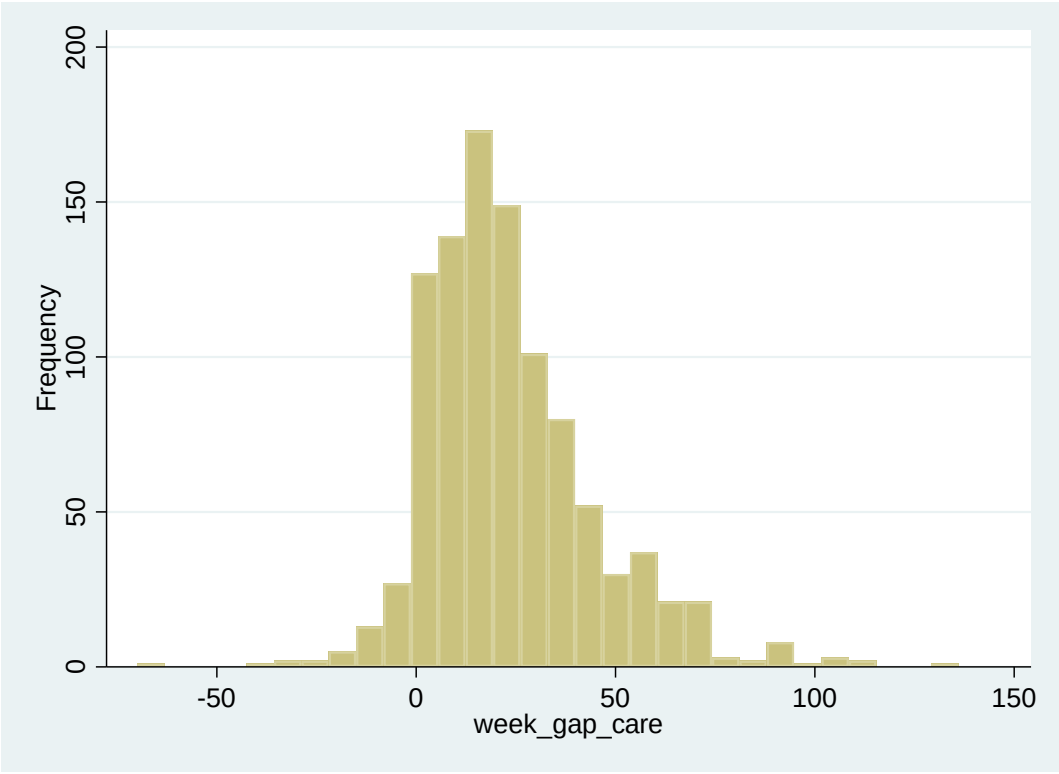
*: p<.05, **:p<.01, ***: p<.001

<Table 7> Summery of Multinomial Regression

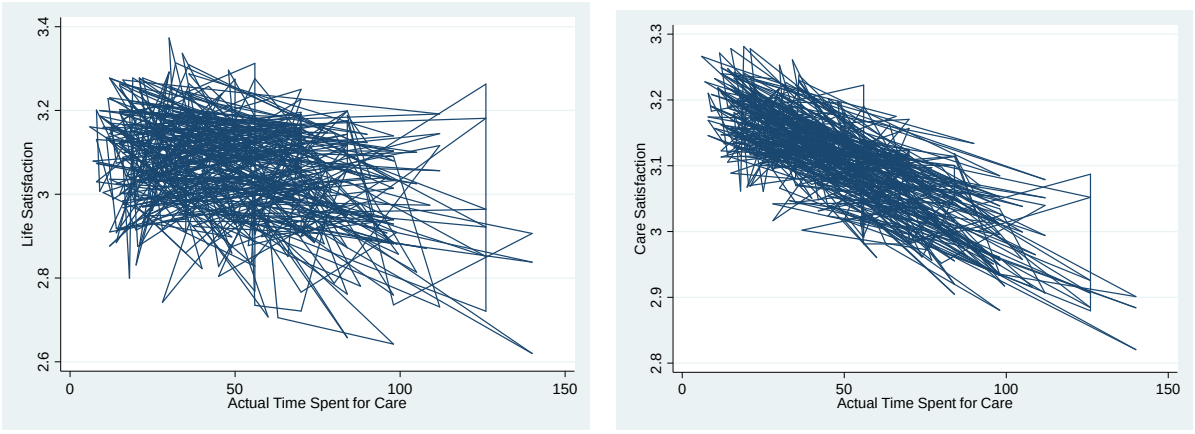
	Ref. severe over-caring		Ref. mild over-caring
	Mild vs. Severe	Matched vs. Severe	Matched vs. Mild
	Coef.	Coef.	Coef.
Attentiveness	-0.497 ***	-0.461 *	0.036
Build good relationship	-0.044	0.153	0.197
Growth/benefits	0.094	-0.164	-0.259
Responsibility to care	-0.017 **	-0.012	0.005
Time-dependent	-0.283 **	-0.217	0.066

*: p<.05, **:p<.01, ***: p<.001

Note) Caregiver's socioeconomic characteristics, elderly receiver's characteristics and household information was controlled in this model.

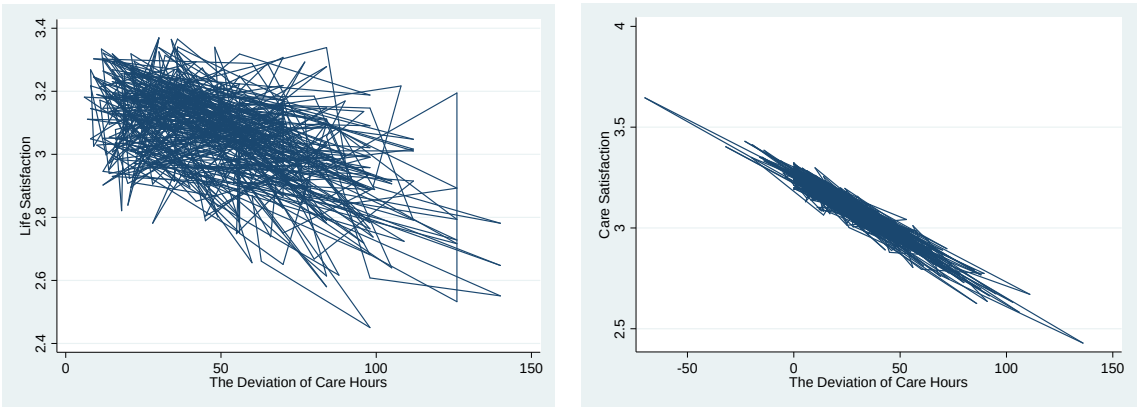


[Figure 1] Histogram for the Deviation of Care Hours



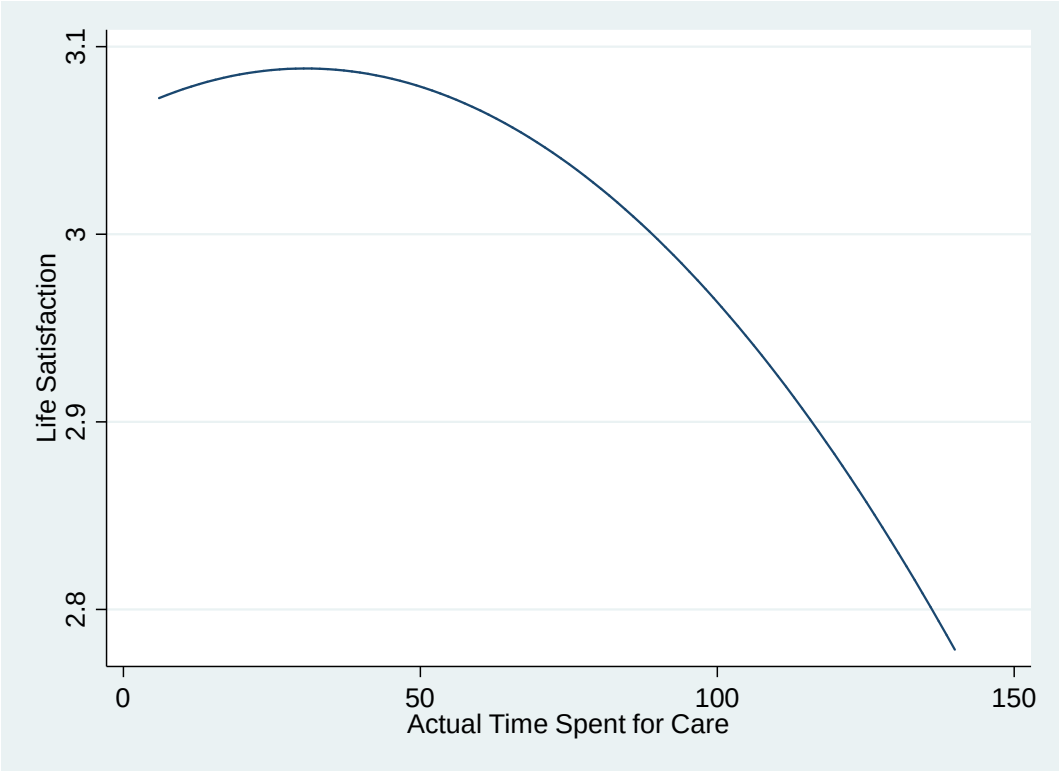
(A) Life Satisfaction (B) Care satisfaction

[Figure 2] Association between Actual Care Time and Quality of Life Measures



(A) Life Satisfaction (B) Care satisfaction

[Figure 3] Association Between the Deviation of Care Hours and Quality of Life Measures



[Figure 4] Estimated Association of Actual Time for Care and Life Satisfaction (Post-OLS regression estimation)